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EXAMINER

LAZORCIK, JASON L

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

08/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,899	Applicant(s) HARTMANN ET AL.	
	Examiner JASON L. LAZORCIK	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

Applicant's reply dated May 26, 2009 amends claims 28, 29, and 34 and cancels claims 18-27, 38, and 39.

In view of Applicant's amendments, Claims 1-27, 38, and 39 have been canceled by Applicant. Therefore, claims 28-37 are pending for prosecution on the merits.

Claims Construction under 35 U.S.C. §112, sixth paragraph

Claim 28 recites the limitation of a “means for determining mass reference value differences for the glass gobs” in line 12. The instant limitation is deemed to pass the three prong test for compliance under 35 U.S.C. §112, sixth paragraph.

Although the format of the instant limitation complies with the requirements of 35 U.S.C. §112, sixth paragraph, the written description fails to explicitly describe the corresponding structure or structures which actually perform the claimed function, namely “determining mass reference value differences for the glass gobs”, and one of ordinary skill in the art would not necessarily identify the precise structure(s) from the written description.

It follows that since no structure disclosed in the embodiments of the invention is expressly linked to the claimed function, the specification lacks corresponding structure as required by 35 U.S.C. 112, sixth paragraph and fails to comply with 35 U.S.C. 112, second paragraph as noted in the following section. For purposes of examination, said

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limitation is accorded the broadest reasonable interpretation and is not limited to "corresponding structure...and equivalents thereof".

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 28-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 28, lines 12 recites the limitation "means for determining mass reference value differences for the glass gobs". As noted above in the claims analysis section under 35 U.S.C. §112, sixth paragraph, the written description fails to explicitly describe the corresponding structure or structures which actually perform the claimed function, determining mass reference value differences. Further, one of ordinary skill in the art would not necessarily be apprised of the precise structure(s) intended to perform this function from the written description. It follows, with respect to the noted limitations, that Applicant has failed to particularly point out and distinctly claim the invention as required by 35 U.S.C. 112, second paragraph.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

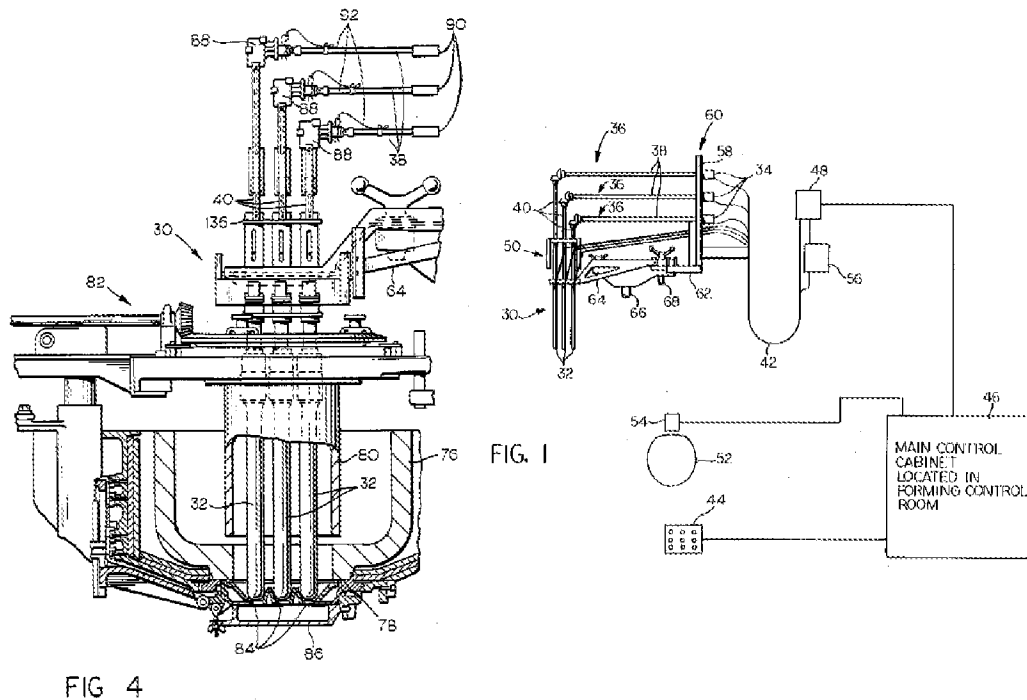
6. **Claims 28-33 and 35-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over DiFrank (US 5,660,610).**

7. Regarding **Claim 28**, DiFrank (US 5,660,610) teaches a device for regulating the mass of glass gobs which is intended for use with a glass forming machine (Col. 2, lines 51-64) of the blow and blow or press and blow type (e.g. I.S. Machine). With particular reference to excerpt figures 1 and 4 (see below), DiFrank teaches a feeder (30) comprising;

- a. a feeder head (76),
- b. at least one plunger (32) disposed in the feeder head.

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- c. A means for determining mass reference values (col. 2, lines 62-64 and/or Col. 4, lines 40-49)
 - d. At least one plunger holder (64) extending substantially in a horizontal direction [**Claim 31,35**]
 - e. Height adjusting devices (34) for moving respective plungers (32) in relation to the plunger holder (64) [**Claim 33, 37**]
 - f. A control unit (46) including an associated drive controller or “drive controller of the plunger holder” [**Claim 36**]
 - g. A restrictor pipe (80) surrounding the at least one plunger
8. Each of the plungers (32) is independently adjustable upward and downward in the feeder head relative to the respective feeder bowl orifice (84) in a manner which permits control over the weight of the containers being formed (Col. 1, lines 26-32; col.4, line 11-13). Stated alternately, it is understood that each plunger (32) in the DiFrank disclosed feeder head may be provided with a “changeable movement profile”



9. Although the DiFrank reference does not explicitly require that the disclosed apparatus is utilized "for each preform station of each section" of the individual section machine (as per Claim 28, lines 14-15), such an application is either implied by the reference or would have been obvious at the time of the invention for one of ordinary skill in the art of individual section type glass forming machines. That is, although the DiFrank reference does not explicitly disclose the instant apparatus at every preform station of each section, the mere duplication of parts has no patentable significance unless a new and unexpected result is produced (*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)). In the instant case, duplication of the feeder apparatus constitutes a trivial extension over the prior art for one having an ordinary level of skill in the art at the time of the invention.

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10. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over DiFrank (US 5,660,610) in view of Ayala-Ortiz (US 4,682,998).

11. As set forth in the rejection of claims above, DiFrank teaches every element of Applicant's claimed invention including, *inter alia*, a glass feeder head with independently adjustable plungers disposed therein for controlling a mass of molten glass discharged from said feeder head. The reference additionally teaches the use of "restrictor pipe" (80) disposed within the feeder head.

(I) DiFrank is silent regarding axial adjustability of the restrictor pipe (80) or the associated control circuit axial adjustment of the pipe.

12. Regarding **Claim 34**, DiFrank is silent regarding the axial adjustability of the restrictor pipe (80) or an associated control circuit to compensate for the changes in level or viscosity of the molten glass.

(II) An axially adjustable restrictor pipe and control circuit represent obvious modifications to the DiFrank apparatus in view of the Ayala-Ortiz disclosure.

13. Ayala-Ortiz teaches a very closely related glass feeder head to that disclosed in the DiFrank reference which includes, *inter alia*, a feeder bowl (1) with orifices (2') for dispensing molten glass, vertically reciprocating plungers (7) disposed within the feeder head, and a rotating restrictor tube (3) for homogenizing said molten glass and for regulating passage of the molten glass towards the orifice (see Figure 1 below). Ayala-Ortiz teaches that in order to increase reliability of the gob forming apparatus, the restrictor tube (3) is provided with a reciprocating mechanism (8) for axially adjusting the position of the tube within the feeder head (1). Said tube (3) and reciprocating

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mechanism (8) are subject to operation of a control circuit designed to compensate for various operating parameters including temperature, homogeneity, viscosity of the glass as well as the level of the molten glass in the feeder bowl (col. 2, lines 19-46).

14. Ayala-Ortiz teaches that such an axially adjustable restrictor tube arrangement paired with an associated control system is advantageous for production of glass gobs and glass articles with the required weight (col. 2, lines 49-54). Further, Applicant appears to acknowledge that axially controlled restrictor tubes similar to the Ayala-Ortiz arrangement are known in the art and would be recognized as such by one of ordinary skill. On this matter, Applicant states that (see Specification, page 15); “The axial position of the restrictor pipe serving as the control variable can be changed in a manner which is known per se as shown by the double arrow 8” (page 15).

15. In view of the foregoing, it would have been obvious for one of ordinary skill in the art to incorporate the axially adjustable restrictor tube of Ayala-Ortiz into the DiFrank apparatus. Such a modification would have been obvious for one of ordinary skill seeking to more closely regulate the mass of glass gobs and the glass articles formed therefrom. Further, Applicant appears to acknowledge that such modifications are per se known in the art and would be recognized as an obvious extension over the DiFrank disclosed apparatus.

Response to Arguments

Rejection of claims 28-37 under 35 USC 112, second paragraph:

Argument #1)

With respect to the rejection of claims 28-37 under 35 U.S.C. 112, second paragraph, Applicant alleges (reply page 10-11) that the Specification as originally filed, specifically page 12, line 19 to page 13, line 6, links corresponding structure for the recited means for determining mass reference differences for the glass gobs” as recited in claim 28.

In response, Applicant is respectfully advised that the cited passage and the broader Specification nowhere expressly links any single structure or group of structures to the recited function of determining the mass reference value differences for the glass gobs. For example, Applicant's referenced passage recites a plurality of individual structural elements including, inter alia, amplifier/signal evaluating unit (65), control circuit (67), and press plunger sensor (50). Any one of the noted structures individually or any combination of said elements could reasonably be construed to fulfill the recited function of determining the mass reference differences. Applicant's Specification provides no guidance regarding the specific structures encompassed by the instant means limitation, and one of ordinary skill would not reasonably be apprised of the metes and bounds of the recited invention.

In view of the foregoing, the rejection of claims 28-37 stands as previously presented.

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Rejection of claims under 35 USC 103(a):

Argument #2)

Applicant alleges (reply page 15) that "there is no discussion in the DiFrank patent of using the needle assembly as part of an individual section glass forming machine". Applicant further alleges that DiFrank "neither recognizes nor addresses the problem of achieving a desired weight for glass gobs being produced by an individual section glass forming machine".

In response Applicant is respectfully advised that the recited invention is directed to "a device for regulating the mass of glass gobs" wherein said device is intended for use in an individual section glass forming machine. The claims are not directed to the IS machine. Therefore, Applicant's arguments are construed to relate to an intended use for the claimed "device for regulating the mass of glass gobs" but they do not pertain to patentable distinctions in the structure of the claimed "device for regulating the mass of glass gobs".

16. In summary, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. United States patent references to Leidy (US 5,885,317),

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Nafziger (US 5,779,749), and Duga (US 4,551,163) are all construed to be closely related to Applicant's claimed molten glass feeder head. That is, each disclosed apparatus provides for independent control over vertically reciprocating plungers within the feeder head assembly. Any reply to the instant Official Action should carefully weight the scope and content of each reference in comparison to the instant claimed invention.

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. LAZORCIK whose telephone number is (571)272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason L Lazorcik/
Examiner, Art Unit 1791

/Eric Hug/
Primary Examiner, Art Unit 1791